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Keller et al.

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(54) **SELF FORMING, THERMODYNAMICALLY STABLE LIPOSOMES AND THEIR APPLICATIONS**

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(51) **Int. Cl.**⁷ **A61K 9/127**

(52) **U.S. Cl.** **424/450; 428/402.2**

(58) **Field of Search** 424/450, 1.21, 424/9.321, 9.51, 417, 94.3, 31.2; 436/829; 935/54; 428/402.2; 264/4.1, 4.3, 4.6

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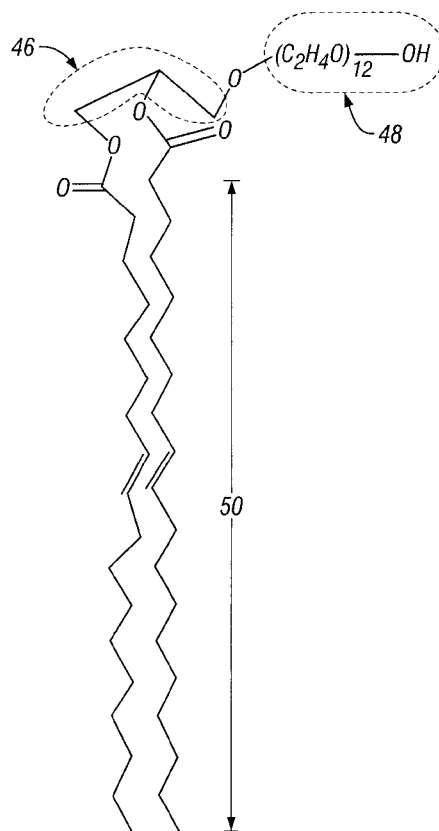
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(57) **ABSTRACT**

A liposome suspension forms spontaneously upon adding a diacylglycerol-PEG lipid to an aqueous solution when the lipid has appropriate packing parameters and the adding occurs above the melting temperature of the lipid. Combinations of lipids may be used in the invention. The liposome suspensions are useful for a variety of purposes, including delivery of therapeutic agents.

17 Claims, 3 Drawing Sheets



PEG-12 Glyceryl Dioleate